

**Notice of Allowability****Application No.**

10/598,724

**Examiner**

JAIME F. CARDENAS-GARCIA

**Applicant(s)**

PETERSEN, PETER GUNNAR

**Art Unit**

3634

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Preliminary Amendment of 09/08/2006.
2. ☒ The allowed claim(s) is/are 1-21.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_.
- (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 3/17/2011.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 09/08/2006
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 3/17/2011.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_.

/JAIME F. CARDENAS - GARCIA/  
Examiner, Art Unit 3634

/Katherine Mitchell/  
Supervisory Patent Examiner, Art Unit 3634

**EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interviews with Attorney starting on March 14 and ending on March 17, 2011.

**The application has been amended as follows:**

2. The following **changes to the drawings** have been approved by the examiner and agreed upon by applicant: extraneous reference characters "14" and "15" appear in Fig. 1. These need to be removed. In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.

**As to the Claims:**

**Please amend claims 1-13 as set forth below:**

**Claim 1 has been amended as follows:**

Everything after "A method for regulating the traction" has been deleted and replaced with:

- in a line of a ladder climbing assistance device, which method comprises the steps of: sensing any movement of the line; and when no traction is applied to the line and movement of the line is sensed for a first predetermined period of time, the traction is increased to a predetermined high level; and when traction is applied to the line and

movement of the line is sensed for a second predetermined period of time, the traction is maintained at the predetermined high level; and when traction is applied to the line and no movement of the line is sensed for the second predetermined period of time, the traction is decreased to a predetermined low level. - -

**Claim 2 has been amended as follows:**

Everything after "A method according to claim 1," has been deleted and replaced with:

- - wherein both the first and second predetermined periods of time are set between 0.1 and 10 seconds. - -

**Claim 3 has been amended as follows:**

Everything after "A method according to claim 1," has been deleted and replaced with:

- - wherein the predetermined high level for the traction is set between 100 Newtons and 800 Newtons. - -

**Claim 4 has been amended as follows:**

Everything after "A method according to claim 1," has been deleted and replaced with:

- - wherein the predetermined low level for the traction is set below 100 N. - -

**Claim 5 has been amended as follows:**

Everything after "A method according to claim 1," has been deleted and replaced with:

- - wherein the decrease of the traction the predetermined low level takes place over a period of time. - -

**Claim 6 has been amended as follows:**

Everything after "A method according to claim 5," has been deleted and replaced with:

- - wherein said period of time for decreasing the traction is set between 0.1 and 10 seconds. - -

**Claim 7 has been amended as follows:**

Everything after "A method according to claim 1," has been deleted and replaced with:

- - wherein movement of the line generates discrete pulses, and that movement is sensed if the number of pulses exceeds a preset value for the first predetermined periods of time and the second predetermined periods of time, respectively; and that no movement is sensed if the number of pulses is less than the preset value for the first predetermined periods of time and the second predetermined periods of time, respectively. - -

**Claim 8 has been amended as follows:**

Everything after "A ladder climbing assistance device" has been deleted and replaced with:

- - for use with an essentially vertical ladder, said ladder climbing assistance device comprising: a line that is movable along the ladder, a motor with a power outlet arranged to provide an essentially constant traction in the line; wherein the ladder

climbing assistance device comprises sensing means for sensing any movement of the line, which sensing means is connected to controlling means for controlling the power outlet from the motor in response to signals from the sensing means, which controlling means is arranged to control the power outlet from the motor to increase the traction in the line to a predetermined high level when movement of the line is sensed for a first predetermined period of time, and maintain the traction in the line at the predetermined high level when traction is applied to the line and movement of the line is sensed for a second predetermined period of time, and decrease the traction in the line to a predetermined low level when no movement of the line is sensed for the second predetermined period of time. - -

**Claim 9 has been amended as follows:**

Everything after "A ladder climbing assistance device according to claim 8," has been deleted and replaced with:

- - wherein the sensing means comprises an inductive sensor arranged in proximity of a driving wheel that is connected to the motor and is in frictional engagement with the line. - -

**Claim 10 has been amended as follows:**

Everything after "A ladder climbing assistance device according to claim 9," has been deleted and replaced with:

- - wherein the driving wheel is provided with an annular V-shaped groove, and that transversally through-going bores are provided close to the rim; the inwardly facing

edges of the bores providing frictional engagement with the line and the outwardly facing edges of the bores providing means that are sensed by the inductive sensor. - -

**Claim 11 has been amended as follows:**

Everything after "A ladder climbing assistance device according to claim 8," has been deleted and replaced with:

- - wherein the sensing means is arranged to generate discrete pulses, and that movement is sensed if the number of pulses exceeds a preset value for the first predetermined periods of time and the second predetermined periods of time, respectively; and that no movement is sensed if the number of pulses is less than the preset value for the first predetermined periods of time and the second predetermined periods of time, respectively. - -

**Claim 12 has been amended as follows:**

Everything after "A ladder climbing assistance device according to claim 8," has been deleted and replaced with:

- - wherein the controlling means comprises an Input/Output unit that is programmed to control the power outlet from the motor in dependence of the signals from the sensing means. - -

**Claim 13 has been amended as follows:**

Everything after "A ladder climbing assistance device according to claim 8," has been deleted and replaced with:

- - wherein the line forms a closed loop. - -

**The following New Claims are added:**

- - 14. The method of claim 2, wherein both the first and second predetermined periods of time are set between 0.2 and 5 seconds. - -
- - 15. The method of claim 2, wherein both the first and second predetermined periods of time are set between 0.4 and 2 seconds. - -
- - 16. A method according to claim 3, wherein the predetermined high level for the traction is set between 200 Newtons and 600 Newtons. - -
- - 17. A method according to claim 3, wherein the predetermined high level for the traction is set between 300 Newtons and 500 Newtons. - -
- - 18. A method according to claim 4, wherein the predetermined low level for the traction is set below 50 Newtons. - -
- - 19. A method according to claim 4, wherein the predetermined low level for the traction is set to 0 Newtons. - -
- - 20. A method according to claim 6, wherein said period of time for decreasing the traction is set between 0.2 and 5 seconds. - -
- - 21. A method according to claim 6, wherein said period of time for decreasing the traction is set between 0.4 and 2 seconds. - -

**Claims 1 -21 are allowed.**

3. The following is an examiner's statement of reasons for allowance:

The claim recites a method for regulating the traction in a line (13) of a ladder climbing assistance device, which method comprises the steps of:

- sensing any movement of the line (13); and

- when no traction is applied to the line (13) and movement of the line is sensed for a first predetermined period of time, the traction is increased to a predetermined high level ( $L_1$ ); and

- when traction is applied to the line (13) and movement of the line is sensed for a second predetermined period of time, the traction is maintained at the predetermined high level ( $L_1$ ); and

- when traction is applied to the line (13) and no movement of the line is sensed for the second predetermined period of time, the traction is decreased to a predetermined low level ( $L_0$ ).

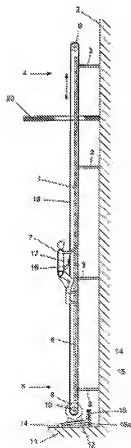


Fig. 1

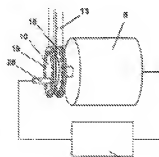


Fig. 3

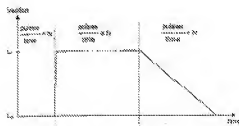


Fig. 4



Because none of the references disclosed the method for regulating the traction in a line of a ladder climbing assistance device, specifically the method comprising the steps of: - sensing any movement of the line (13); and when no traction is applied to the line (13) and movement of the line is sensed for a first predetermined period of time, the traction is increased to a predetermined high level ( $L_1$ ); and when traction is applied to the line (13) and movement of the line is sensed for a second predetermined period of time, the traction is maintained at the predetermined high level ( $L_1$ ); and when traction is applied to the line (13) and no movement of the line is sensed for the second predetermined period of time, the traction is decreased to a predetermined low level ( $L_0$ ), nor is there a motivation to combine them, the claims are deemed patentable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAIME F. CARDENAS-GARCIA whose telephone number is (571) 270-5375. The examiner can normally be reached on m-f 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katherine W. Mitchell can be reached on (571) 272-7069. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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